

an optical element provided on the substrate, the optical element being
connected with the electric connection terminal; and
one end of a slender light transmitter fixed in the groove and optically
coupled with the optical element.

5. An optical module comprising:
a substrate having a groove in a surface of the substrate;
an electric connection terminal provided on the substrate;
a planer lightwave circuit provided on the substrate, the planer lightwave
circuit being connected with the electric connection terminal; and
an optical fiber partially provided in the groove and optically coupled with
the planer lightwave circuit.

7. A combination comprising:
a connector connectable with an electric circuit board; and
an optical module including:
a substrate having a groove in a surface of the substrate;
an electric connection terminal provided on the substrate, the electric
connection terminal electrically connectable with the connector;
an optical element provided on the substrate, the optical element being
connected with the electric connection terminal; and
one end of a slender light transmitter fixed in the groove and optically
coupled with the optical element.